

Montana Transportation Planning Newsline

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April 1997



MDT's Mission is to serve the public by establishing a transportation system that emphasizes safety, environmental preservation, cost effectiveness, and quality.

From the Director

It's no "accident" that MDT's Mission Statement emphasizes safety.



From the maintenance crews that work day and night to keep our highways open to the MDT staff that trains transit providers how to safely move our elderly and disabled, MDT employees are involved in many programs designed to produce a safer transportation system.

This issue of *Newsline* describes some of MDT's major safety programs and explains how your community can participate in these programs.

I hope you find this information useful and continue to do your part by driving defensively.

Marvin Dye
Director of Transportation

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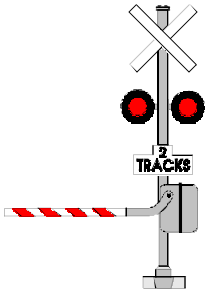
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Special Insert
Hazardous Elimination Program

Public Railroad Grade Crossing



Signal Projects

The Utilities Section of MDT's Right-of-Way Bureau funds public railroad grade crossing signal projects statewide. There are approximately 1500 public crossings in Montana, of which some 400 are signalized. Signal projects now average about \$75,000 to \$140,000 depending on equipment required.

The 1997 signal program is funded at \$1,200,000, with 15 projects in progress. Costs for signal work are increasing dramatically, so only 10 to 12 signal projects may be funded in 1998.

Road authorities (city, county, state, etc.) are responsible for road approaches, advanced warning signs, and pavement markings at railroad crossings. Where signals are installed, the road authority is also responsible for vehicular damage to signal equipment. The railroad is responsible for the crossbucks, crossing surface and, where signals are installed, maintenance of that signal. When MDT installs a signal, the safety program pays for the signal equipment.

Public pressure for grade crossing signals has been increasing steadily because of increased vehicular and train traffic. MDT's experience has shown that everyone needs to work together to resolve the safety problems at railroad crossings. Remember, trains cannot stop quickly or turn to avoid you — they have the right-of-way. If you have any questions, call Robert Fischer at (406)444-6080.

Employee Safety Program

The Organizational Development Bureau/Loss Control Unit manages MDT's Employee Safety Programs. The Unit guides and directs the design, development, and implementation of four primary programs: loss control, risk management, safety compliance and the alcohol and controlled substance testing program.

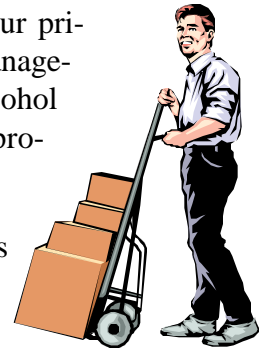
The Loss Control Program works to reduce accidents and injuries to employees in the workplace.

The Risk Management Program is designed to reduce the Department's insurance liability by controlling the risk through investigations and education.

The Occupational Safety and Health Program ensures compliance with federal, state and local safety rules and regulations.

The Alcohol and Controlled Substance Testing Program ensures MDT compliance to the Federal Alcohol and Drug Testing program which requires drug and alcohol testing of MDT commercial licensed drivers to ensure the safety of the general public. Commercial licensed drivers are those who operate equipment weighing 26,001 pounds or more, i.e., snowplows, motor patrols, loaders and core drill trucks.

For information regarding the Employee Safety Program, call Mike Buckley at (406)444-6051.



Construction Zone / Maintenance Safety

MDT is constantly challenged to build new roads, maintain our current ones, and at the same time ensure the safety of our employees and the public. By using proper signing and making people aware. The Department works to improve highway safety for everyone.

MDT's Construction Bureau is now offering a 16-hour course to all construction and maintenance workers as well as other public agencies. Call Bob Tholt at (406)444-6001 for further information.

MDT's Maintenance Division has developed the Transportation Awareness Program (TAP) to let people know what is going on out on our roads, why it's happening, and how it's done. The program provides local MDT employees to speak to concerned citizens about what type of construction or maintenance is happening in their community. For further information regarding TAP, call Maryann Toohey at (406)586-9562 or Dan Williams at (406)444-7604.



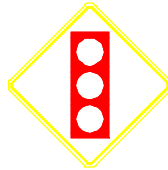
*****When entering a Work Zone - SLOW DOWN - LOOK AHEAD - Be aware of your surroundings!*****

Safety Management

The main goal of MDT's Safety Management Section is to reduce the number and severity of traffic crashes on Montana's highways. The Safety Management Section deals with three main programs: safety audits, the safety management system and the safety engineering improvement program.

Safety Audits: During the design of highway construction projects, designers analyze accident histories and, when feasible, compare them to statewide trends. Any unusual trends and accident cluster areas are considered in the final design.

Safety Management System: With increasing growth and larger traffic volumes, Montana traffic accidents over the last ten years have been increasing. In an effort to improve highway safety, a statewide multi-disciplinary effort is needed. MDT has formed a Steering Committee to review topics such as work zone safety, high hazard elimination, community/corridor, and occupant protection. The Steering Committee has been active in coordinating traffic safety efforts, reviewing proposed legislation, studying high accident rate corridors and identifying training needs. There are numerous traffic safety-oriented organizations at the local level which the Steering Committee encourages to develop area traffic safety plans, coordinate safety efforts, and reach a consensus on the most important issues.



Safety Engineering Improvement Program:

There are many proposed highway safety projects submitted each year. These seven steps are followed when implementing a Safety Engineering Improvement Program:

1. System records are reviewed and updated.
2. High accident locations are identified.
3. A background investigation of accident clusters is conducted.
4. A field investigation is completed to identify possible countermeasures.
5. Engineers design feasible alternatives. Using the preliminary engineering designs proposed safety projects are ranked using a benefit/cost formula. Projects with highest returns are programmed based on available funding and resources.
6. Projects are designed and implemented.
7. Completed projects are evaluated to determine if the projects address the problem.

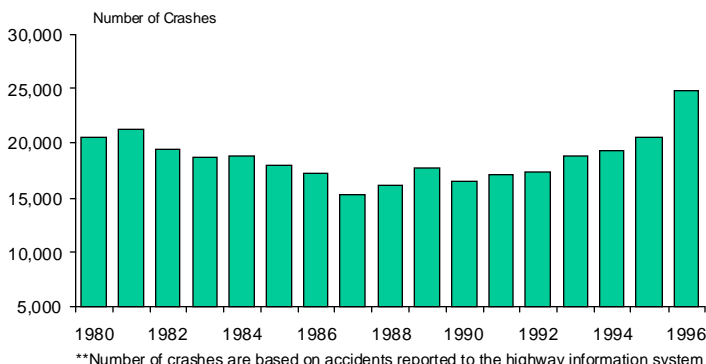
For more information on Safety Management Programs, please contact Pierre Jomini at (406)444-6113.

Did you know federal funds are available via the Federal Hazard Elimination Program?

See Special Insert for details.

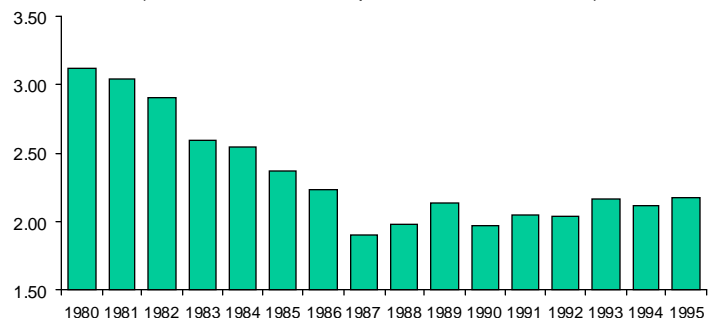
***Safety Management's Motto:
DRIVE DEFENSIVELY AT
ALL TIMES***

Montana Reported Traffic Crashes



Montana Crash Rate

(Number of Accidents per million vehicle miles)



Traffic Safety

MDT's Traffic Safety Bureau's overall mission is to promote public health, safety and welfare through efforts to reduce death, injury and property loss resulting from traffic crashes. Although the Bureau addresses all aspects of traffic safety, most of its effort is directed toward education and enforcement programs.



The Bureau prepares an annual plan to guide its efforts. This plan includes an assessment of all major problem areas, in both chart and narrative form, and highlights major problems in traffic safety and how these problems are collectively and individually changing.

The overall direction of traffic safety in Montana has shown steady improvement for a number of years. For example, Montana's fatality rate trend has been decreasing since 1969. At that time the rate was 7.64 fatalities per hundred million miles traveled. The rate dropped to 4.92 by 1980 and stood at 2.29 in 1995.



Increased use of safety belts and child safety seats, sharp reductions in alcohol related crashes, and more forgiving roadways are the key factors which have played a role in Montana's improved safety record. Montana's accident and injury rates have been generally stable.

In 1995, 11.3% of all traffic crashes were alcohol related compared to 22% in 1983. Safety belt use has shown marked improvement from about 10% in 1980 to a current all time high of about 72%. Education and enforcement programs have played key roles in bringing about these dramatic changes in our behavior.

Typically, approximately ten traffic crash problem areas are addressed each year in the Bureau's annual plan. These are classes of problems relating to traffic safety to which the Bureau directs the use of grants to state and



local governments. The plan endeavors to direct limited resources to the most significant problems and to the type of grants that are likely to produce the greatest benefit to the public.

In general, the grants are used to address:

- ✓ Misuse of alcohol and other drugs when operating motor vehicles.
- ✓ Absence of proper occupant protection habits.
- ✓ Variety of hazardous driver actions such as driving too fast for conditions.
- ✓ Slow or ineffective emergency medical care for traffic crash victims.
- ✓ Danger in transporting children to and from school.
- ✓ Lack of good data or information to make and evaluate decisions.
- ✓ Frequency and severity of bicycle / pedestrian crashes.
- ✓ Severity of motorcycle crashes.

Proposals are requested from many state and local government agencies to participate in addressing the priority programs each year. Approximately 50% of the federal funding received is contracted to Montana local government for these programs, and 50% to state agencies. The Bureau also provides state DUI reimbursement fee funding for county level DUI task forces.

The Bureau takes pride in its focus on traffic safety partnerships of citizens and government working together for the common good. Many times funding is just not available, but encouragement, printed materials, and helpful ideas and suggestions are usually available to all. For further information regarding Traffic Safety issues, contact Albert Goke at (406)444-7301.

MDT Safety Program at Work: Occupant Protection

Why should you use a car seat?

Motor vehicle crashes are the leading cause of death for children ages 1 - 5 in the United States. Correct use of car seats could prevent many of these tragedies. In a crash or sudden stop, an unbuckled adult holding a baby can crush the child into the windshield or dashboard. In a crash at 30 miles per hour, a 10-pound baby could be ripped from an adult's arms with a force of almost 200 pounds and hurled into the dash or windshield. This is why child occupant protection is important!



Forward-facing safety seats used with toddlers and older children typically place children several inches closer to the dashboard than the normal adult seating position. **Therefore, the safest practice is to place all safety seats and children 12 and under in the back seat.**

When should you use a car seat?

A car seat should be used on every trip, long or short, as most car crashes happen within 25 miles from home. Be sure any friends, relatives, or baby-sitters have correctly installed safety seats they can use every time the child is in the car.

What kind of car seat should you use?

Infants up to 20 pounds should ride facing the rear of the vehicle in infant-only or convertible safety seats (seats that convert from rear-facing for infants to forward-facing for toddlers).

Children 20 to 40 pounds should ride facing forward in convertible safety seats or harness systems.

*Children who have outgrown their convertible seats or harnesses should ride in booster seats until adult safety belts fit them properly.

**Never let children ride in the bed of a truck or sleep or play in the rear of a station wagon without proper restraint. In a crash they could be thrown out of the vehicle.

Remember: Children and air bags do not mix. Air bags could seriously injure or kill children sitting in the front seat.

An infant in a rear-facing safety seat must be placed in the **back seat**, never in the front seat of a motor vehicle with a passenger-side air bag. During a forward impact, the rapidly inflating air bag could strike the safety seat with enough force to seriously injure or kill the infant. If the vehicle has no back seat, such as a pickup truck, an infant will be safest in a rear-facing childseat only if the vehicle does not have a passenger-side air bag.

Other Precautions:

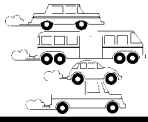
- ✓ Make sure you position the car seat harness straps and clips correctly for the size of the child.
- ✓ Never use a household baby carrier in place of a safety seat.
- ✓ Never use a household booster seat, pillow, or telephone books to boost a child in a vehicle.
- ✓ In an emergency, any kind of restraint is better than no restraint.
- ✓ If your child's safety seat has been in a crash, contact the safety seat manufacturer. Hidden crash damage can severely weaken a car seat.
- ✓ Be sure to get a copy of the instructions for the exact seat you own.
- ✓ Complete and return the registration card that comes with your new car seat so the manufacturer can contact you in case of a safety recall.

Adult Safety Points:

Everyone should buckle up with both lap and shoulder belts on every trip. Air bags are supplemental protection devices. The lap belt should be worn under the abdomen and low across the hips. The shoulder portion should come over the collar bone away from the neck and cross over the breast bone. The shoulder belt in most new cars can be adjusted on the side pillar to improve fit.

For more information concerning child occupant protection, contact Priscilla Sinclair at (406)444-7417.





MDT Planning Division Updates



Montana to Host Rural Advanced Technology and Transportation Systems 1997 International Conference

The Western Transportation Institute (WTI) and MDT will host the Rural Advanced Technology and Transportation Systems 1997 International Conference **August 24-27, 1997 at Big Sky**. The theme of the conference is "Rural ITS: Making it a reality around the world." This theme was chosen to highlight the important role that transportation and advanced technologies can play in making rural travel safe and efficient throughout the world. The goal of the conference is information and technology transfer across international borders. For more information please contact Dennis Hult at (406)444-9237.

Who's WTI?

The Western Transportation Institute was established in 1994 by the California and Montana Departments of Transportation and Montana State University as a national and international center for advanced rural transportation research and education. As a research center, WTI strives to improve rural transportation through research and development of advanced ITS technology.

What's ITS all about?

Intelligent Transportation Systems (ITS) uses advanced technologies to make our transportation system safer and more efficient. MDT is moving towards developing a full-scale ITS program. In fact, MDT is already involved in a number of ITS applications including SCAN Weather Monitoring Systems, advanced traffic control, and Weigh-In-Motion (WIM). ITS applications under development or consideration include electronic traveler information kiosks, ride matching in the Bitterroot Valley, and the Montana Department of Justice (Highway Patrol) is testing on-board computers that will allow officers to quickly run license plate checks and access other important information.

Division Kicks Off Rail and Access Management Projects

MDT is responsible for rail planning, developing and updating the Montana State Rail Plan, and administering federal funds under the Local Rail Freight Assistance (LRFA) Program.

Currently the Planning Division is in the process of hiring a consulting firm to amend the Montana State Rail Plan to include an analysis of two proposals received by MDT through a project solicitation process: A spur line project at the Northern Express Transportation Authority intermodal facility in Shelby, and a track improvement project on the Whitetail Line in Northeastern Montana. This is a necessary step in the federal grant applications process for project funding through the LRFA Program. Both projects would benefit area communities and Montana's shippers. For more information, call Jan Vogel at (406)444-4262.

Another Project the Planning Division is working on pertains to TranPlan 21, Montana's statewide multimodal transportation plan. TranPlan 21 commits MDT to several actions to improve the Department's access management efforts. Experiences in other states have shown that access management programs developed and implemented in cooperation with local governments and developers are cost-effective ways to maintain safe and efficient highways and often delay the need for costly expansion projects.

The initial effort will include a review of MDT access management activities to help determine ways to improve and streamline the process and the development of an access classification system for Montana's major highways. This system would provide more consistent guidance to MDT employees in addressing requests for new highway approaches.

An advisory group including representatives of local governments and developers will serve as a "sounding board" during the process to ensure the results reflect their input. For more information refer to TranPlan 21 or call Dick Turner at 444-7289.

THE TRANSPORTATION PLANNING NEWSLINE is published quarterly by the Montana Department of Transportation, Transportation Planning Division. The preparation of this newsletter is financed through the Federal Highway Administration's Statewide Planning and Research Program. Articles appearing in the Transportation Planning Newsletter are contributed by the staff of the MDT Transportation Planning Division.



MDT Planning Division Updates



Bicycle/Pedestrian Coordinator Added to Division

Montana's statewide transportation plan, TranPlan 21, committed MDT to developing a statewide bike/pedestrian program in order to improve bicycle/pedestrian safety and facilities and promote this mode of travel in Montana. Because of this commitment, Jennifer Dalrymple has joined MDT as Bicycle/Pedestrian Coordinator. She is part of the Community Transportation Enhancement Program Bureau within the Transportation Planning Division. Dalrymple has a B.S. Degree in Civil Engineering with a transportation emphasis and an MS in Aeronautical Science. She spent most of her life in sunny Arizona and was in the US Air Force for 10 years prior to settling in Helena. Some of Dalrymple's responsibilities include: Developing a statewide bike/pedestrian plan; producing a statewide bicycle-related touring guide; increasing bike/pedestrian safety awareness; and working with community planners to address bike/pedestrian issues. Jennifer can be contacted at (406)444-9273.



Officers and Board Members Elected for MTA and RTAP

The Montana Transit Association (MTA) elected officers at its annual planning meeting February 20, 1997 in Helena. Serving as President for 1997 is Marlys Sittner of the Great Falls Transit System; Mike Shea, Butte-Silver Bow Transit, Vice President; Ron Wenger, MET Transit in Billings, Treasurer; and Colleen Pankratz, Valley County Council on Aging in Glasgow, Secretary.

MTA's purpose is threefold:

1. To encourage cooperation among members in dealing with public transportation issues.
2. To present to the people of Montana the importance of public transportation.
3. To advise and counsel both executive and legislative branches of local, state, and federal governments on public transportation issues.

In conjunction with this meeting, a new Rural Transit Assistance Program (RTAP) Advisory Board was approved. This Board makes recommendations to the Transit Section on training and technical assistance projects. Cindy Jaynes of Fergus County Council on Aging in Lewistown is the RTAP Board Chairperson. Members of the Board include Deanna Thielman, Eagle Transit, Kalispell; Jana Rogers, Galavan, Bozeman; Amy Busch, Ravalli County Council on Aging, Hamilton; and Helen Atwell, West Yellowstone Transportation Advisory Committee.

Heads Up.... 1998 STIP Planning Process to Begin

The Project Analysis Section is gearing up for the 1998 Statewide Transportation Improvement Program (STIP) process. The STIP is a list of all transportation projects proposed for the State of Montana over the next three years (1998-2000). If you have any ideas for transportation projects in Montana, now is the time to submit them to the Project Analysis Section. A draft version of the STIP, which includes a list of nominated projects for the future, will be available for public comment in mid-summer. This is your opportunity to become involved in the selection of Montana transportation projects. The STIP will be featured in the next issue of the *Newsline*.

For more information, contact Jeff Ebert at (406)444-7639 or 1-800-714-7296, E-mail U2424@long.mdt.mt.gov.

Transportation Planning Division Telephone Numbers

Only the most frequently requested numbers are listed here. For an area or person not listed, call **1-800-714-7296** (in Montana only), or **(406) 444-3423**.

TDD (406) 444-7696 or 1-800-335-7592

| | |
|----------------------------------|----------|
| Administrator (Patricia Saindon) | 444-3143 |
| CTEP (Mike Davis) | 444-4383 |
| Mapping (Joe O'Neil) | 444-6119 |
| Multimodal Planning | |
| (John Craig) | 444-6370 |
| Projects (Jeff Ebert) | 444-7639 |
| Public Involvement | |
| (Dave Dreher) | 444-6245 |
| Rail Planning (Jan Vogel) | 444-4262 |
| Secondary Roads (Gary Larson) | 444-6110 |
| Statistics (Rick Rogne) | 444-6111 |
| Traffic Safety (Albert Goke) | 444-7301 |
| Traffic Statistics (Dan Bisom) | 444-6122 |
| Transit (Janis Winston) | 444-4210 |
| Urban Planning (Ross Tervo) | 444-3445 |
| ITS Planning (Dennis Hult) | 444-9237 |
| Newsline Editor (Sally Yarnall) | 444-3475 |
| Newsline Distribution | |
| (Kathy Covert) | 444-7239 |

MDT Upcoming Events....

Child Occupant Safety Training
(sponsored by the Montana Traffic
Safety Bureau):

April 7 & 8 - Aladdin Motor Inn,
Helena

April 10 & 11 - Sheraton Hotel,
Billings

Transportation Commission Meetings

May 14 & 15 - Red Lodge

July 8 & 9 - Dillon

August 19 & 20 - Kalispell

Sept. 30 & Oct. 1 - Sidney

Legislative Session Ends

April 30 - Helena

Intermodal Transportation Group
Conference

June 25 - 27 - West Yellowstone

Tribal Technical Assistance Program

August 13 - Billings

(call 1-800-541-6671 for information)

Rural Advanced Technology and
Transportation Conference

August 24 - 27 - Big Sky

For More Information on Any of These Events

Call 1-800-714-7296

Montana Community Transportation Enhancement Program Progress Report As of March 1997

The 1997 allocation of enhancement funds to 107 local governments throughout Montana was approved by the Montana Transportation Commission in March.

Currently, 258 CTEP projects are under development or completed. Local governments have obligated \$18.6 million of their allocated funds toward projects. MDT has reimbursed \$3.0 million for work completed.

The following is a summary of projects within each phase of the CTEP process:

Phase I - Eight projects are undergoing MDT review.

Phase II - There are currently 44 projects in the Agreement Development Process.

Phase III - There are currently 129 projects in the Project Development Process.

Phase IV - There are 46 Projects in the Ad/Award & Construction Stage.

Phase V - There are 31 Substantially Completed / Completed Projects.

For further information regarding CTEP projects contact
Mike Davis (406)444-4383 E-Mail U1972@long.mdt.mt.gov or
Ed Hedlund (406)444-0809 E-Mail U3589@long.mdt.mt.gov

Montana Department of Transportation Transportation Planning Division

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P.O. Box 201001

Helena, Montana 59620-1001

(406) 444-3423

TDD (406) 444-7696 or 1-800-335-7592

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Federal Hazard Elimination Program

What Is The Hazard Elimination Program?

The Hazard Elimination Program is a federally funded program designed to address high hazard accident locations. Some examples of types of projects addressed with these funds are signing, delineation, guardrail installation, slope flattening, channelization, or roadway realignment.

Who Is It Managed By?

MDT's Safety Management Section is responsible for conducting an annual review of investigated traffic accidents of record in order to develop a priority list of locations that could participate in the Federal Hazard Elimination Program.

Where Does The Money Come From?

The funding for corrective actions at these locations is 90% Federal participation and 10% state and/or local participation.

Who Is Eligible?

To be eligible, the city/county must be a regular participant in reporting accidents to the Highway Information System (HIS), and the proposed improvement must not be a maintenance function.

What Are The Goals Of The Hazard Elimination Program?

The goals of the Safety Management System and Hazard Elimination Safety Program are to reduce the number and severity of crashes on Montana roadways.

How Are High Hazard Locations Identified?

High hazard locations are identified by accident trends based on number of crashes, accident rates, severity of crashes, or a combination of these factors.

How Many Locations From Each City/County Can Be Submitted?

Up to five locations may be submitted; these sites will be included in the overall statewide ranking and priority listing.

What Information Needs To Be Submitted With The Application?

Safety priority list, accident analysis, traffic information and proposed improvements (See application on the back of this page).

What Is The Review And Approval Process?

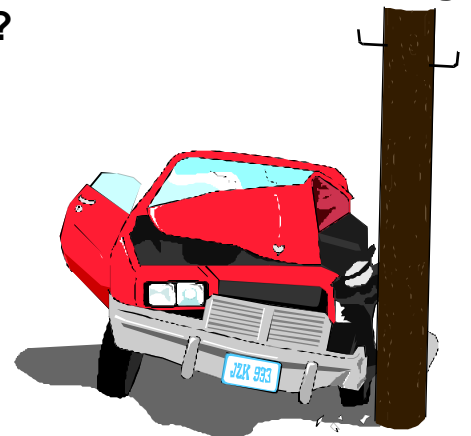
After all applications from all participating cities/counties are received, a prioritized listing by benefit/cost ratio is developed. A program for improvement will be developed, subject to the availability of funds and positive benefit/cost ratio from this listing. At that time, a copy of the listing will be distributed to participants.

Who Is The Application Submitted To?

Montana Department of Transportation
Safety Management Section
2701 Prospect Ave.
Helena, MT 59620-1001
(406)444-6113

When Is The Deadline For Submitting Applications?

August 1, 1997



Application For Federal Hazard Elimination Program

Each City/County should submit one application per intersection or high hazard location (up to five) to be considered for funding with a copy of their safety jurisdiction-wide priority list.

Send to: Montana Department of Transportation
Safety Management Section.
2701 Prospect Ave.
Helena, MT 59620-1001

1. City/County Of Area _____

2. Location Description Of Intersection Or Hazard Area

3. Collision Diagram Of Investigated Accidents

- A. Type - Pedestrian, Angle, Rear-end, Other, Etc.
- B. Severity - Fatal, Injury, Or Property Damage

4. Time Period The Data Is For:

From Date _____ To Date _____

5. Traffic

- A. Average Daily Traffic Entering From Each Leg Of An Intersection
- B. Average Daily Traffic (High Hazard Location)
- C. Percent Traffic Is Projected To Increase Or Decrease In Next Few Years And A Short Explanation Of This Increase Or Decrease

6. Accident Trend And Countermeasures

- A. Identified Accident Trends
- B. Corrective Measures Proposed To Address The Accident Trends

7. Proposed Improvements

- A. Improvement To Be Considered And A Sketch Of The Improvement
- B. Detailed Estimate Of Cost For The Improvement

*** Please attach diagram and analysis to application ***